

U.S. Environmental Protection Agency Great Lakes National Program Office (GLNPO) Significant Activities Report

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Earth Keeper Clean Sweep a Tremendous Success

A Clean Sweep (hazardous waste collection) event in Michigan's Upper Peninsula under the Earth Keeper initiative was an unprecedented success. A total of 45.7 tons of toxic materials were collected in the event held on Earth Day, April 23rd in the parking lots of 25 Upper Peninsula churches, temples, and other houses of worship. Wastes collected included: pesticides, herbicides, mercury (including over 40 pounds of raw mercury), oil-based paints and thinners, car batteries, anti-freeze and harsh cleaners. The hazardous wastes were distributed to the Delta County and Marquette County hazardous waste processing facilities with 25.5 tons going to Delta County and 20.2



Upper Peninsula Clean Sweep collection site at Iron Mountain, Michigan City Hall (Photo courtesy of Wil Shampo)

tons to Marquette County. To put the success of the event into perspective: the Delta County facility received more hazardous waste in the Earth Keeper event than in the last seven years, and the Marquette facility received more than it does in an entire year!

Earth Keeper is an Upper Michigan environmental initiative begun in 2004 when representatives of nine different faiths (Catholic, Lutheran, Methodist, Presbyterian, Buddhist, Jewish, Unitarian, B'hai and Episcopal) signed the Earth Keeper Covenant pledging their commitment to work in partnership with Tribes, government, and citizen organizations for the stewardship and protection of the natural environment of the Great Lakes Basin. Annual clean sweep events are among the commitments made in the Covenant.

The Clean Sweep project was funded in part by USEPA, the Keweenaw Bay Indian Community and the Michigan Department of Agriculture. The Central Lake Superior Watershed Partnership and the Cedar Tree Institute coordinated the project.

The Clean Sweep project responded to a huge unmet need in the Upper Peninsula since only two of the 15 counties have hazardous waste processing facilities. The project's success was due in large part to the publicity given the event by the Earth Keeper faith network which included approximately two-thirds of the Upper Peninsula's total population represented in over 125 congregations/churches and over 50 communities.

(Contact: Elizabeth LaPlante, 312-353-2694, laplante.elizabeth@epa.gov; or Carl Lindquist, Director, Central Lake Superior Watershed Partnership, 906-226-9460, carl. lindquist@macd.org)

Lake Guardian Sets Sail

USEPA Great Lakes National Program Office's 180-foot research ship, the R/V Lake Guardian, set sail on April 1st from Milwaukee, Wisconsin to perform the 2005 Spring Water Quality Survey. The 2005 Spring water quality survey was completed on April 19th. The *R/V Lake Guardian*, its crew and scientists sampled all the Great Lakes. GLNPO is responsible for monitoring the offshore water quality of the Great Lakes to evaluate water quality over time and identify any emerging water quality problems. Comprehensive water quality surveys are conducted in all five Great Lakes in both the spring, when the water is cold and well mixed, and in the summer, when the lakes are biologically active.

Samples were collected for: Chemical/Nutrient Parameters

• Phosphorus in open water (controls algae growth, concentrations affected by



Scientists prepare to deploy plankton sampling net

sewage processes, phosphate detergents, and agricultural land uses);

- Nitrogen in open water (important in plant growth, concentrations affected by the burning of fossil fuels);
- Silica in open water (important in growth of diatoms, algae that form the base of the food web); and
- Chloride (an indication of human inputs into the lakes).

Physical and Water Quality Parameters

- Water temperature,
- Transmissivity,
- Incident light,
- Air temperature,
- Wind speed,
- Wave height,
- Barometric pressure;
- Conductivity,
- Dissolved oxygen, and
- pH.

Biological Parameters

- Phytoplankton and zooplankton (important indicators of the health of the food web and indicators of lower levels of the food chain);
- Benthic Community Analyses
 (important indications of the ecology of the bottom lake and potential disruptions as a result of chemicals or invading species such as the zebra mussel and

quagga mussel).

The data from these surveys has been important in identifying the changing nutrient (phosphorus) levels in Lake Erie, and in tracking the changing biology and chemistry of the lakes. This is the 23rd year of the survey with many of the same stations being sampled using similar techniques to those of 1983. Prior to the survey, the crew underwent training in analytical and sampling methods, health and safety, and, for some, emergency medical training.

(Contact: Glenn Warren, 312-886-2405, warren.glenn@epa.gov)

Great Lakes Collaborative Efforts Highlighted

Norm Niedergang, Acting Deputy USEPA Region 5 Administrator spoke about collaborative environmental efforts in the Great Lakes when he addressed a Plenary Town Hall Meeting of the 2005 National Environmental Partnership Summit, held April 11th to 14th at the Fairmont Hotel in Chicago, Illinois. The theme of the meeting was collaboration. Mr. Niedergang described how the Great Lakes Binational Toxics Strategy came about and how it has succeeded in bringing about significant reductions in uses and releases of persistent bioaccumulative toxic substances. The Strategy is a good example of collaboration between two countries as well as between a wide spectrum of stakeholders, including governmental and non-governmental organizations. He also described the Great Lakes Regional Collaboration effort being undertaken in the U.S. as a result of President Bush's Executive Order on the Great Lakes. The Collaboration is bringing together all interested parties to work together to develop a plan to protect and restore the Great Lakes.

(Contact: Ted Smith, 312-353-6571, smith. edwin@epa.gov)

Ottawa River Studies Planning

On April 18th, Mary Beth G. Ross and Scott Ireland visited the Ottawa River - Lagrange Reach site near Toledo, Ohio. The purpose of the site visit was to meet with the Ottawa River Project Team and discuss logistics for the sediment sampling event scheduled for May 2nd. The Project Team discussed remaining issues with the sediment sampling event and options for assessing source control, walked the site where the sediment core processing will take place, and discussed the bathymetric and sediment thickness survey with the USEPA Superfund FIELDS group, who were also on-site.

GLNPO staff and other Project Team members also met with University of Toledo - Lake Erie Center staff to discuss the possibility of using their custom-made sediment traps in the Ottawa River. These traps are specially designed for shallow water use, and the University of Toledo researchers have successfully deployed them for the past two years in similar, nearby waterbodies. The Project Team will draft a sampling plan to use these traps to assess possible contamination coming from upstream of the



The R/V Mudpuppy gets launched from a bridge over the Ottawa River

proposed remediation site, and to determine what the new surficial concentrations will be after the proposed remediation.

(Contact: Mary Beth G. Ross; 312-886-2253; ross.marybeth@epa.gov)

New Legacy Act Projects Proposed

During the month of April, GLNPO received two new project proposals under the Great Lakes Legacy Act. The first was received from the Hammond Sanitary District in Hammond, Indiana. This project proposes to remove up to 40,000 cubic yards of contaminated sediment from an area approximately 4,000 feet in length, nearly 24 feet wide and up to 15 feet deep along the north water's edge of the West Branch of the Grand Calumet River. The total amount requested for this project is approximately \$7 million, of which 65% is being requested from the Legacy Act. The second proposal came in from the Michigan Department of Environmental Quality for a sediment investigation of Ryerson Creek and selected areas of Muskegon Lake, in Muskegon, Michigan. The primary goal of this project is to gather additional sediment chemistry and toxicity data to further delineate the spatial sediment contamination impacting aquatic life within Ryerson Creek and Muskegon. The secondary goal is to develop engineering designs estimating the amount and areas of contaminated sediment that may be removed to support the development of a focused feasibility study.

(Contact: Scott Ireland; 312-886-8121, ireland.scott@epa.gov).

Waukegan Harbor PCB Data Available

In January 2005, GLNPO, SFD, and CH2M Hill coordinated on a sampling survey of Waukegan Harbor sediments. The results



Aerial view of Waukegan Harbor on Lake Michigan in Northern Illinois

from this survey, including data for PCB and asbestos, are now available in PDF format. Results indicate moderate to heavy PCB contamination in sediments of the inner portions of Waukegan Harbor. The highest PCB level found during the 2005 sampling was 35 ppm. USEPA and its contractor will use the most recent data to develop volume and cost estimates for a potential remediation project at the site. Summary results are available in PDF.

Waukegan Harbor was dredged in early 1990's to meet a 50 ppm cleanup target — one of the first sediment cleanups in the Great Lakes. One million pounds of PCBs removed in the cleanup. While PCB concentrations of fish from the harbor have decreased, they remain above levels considered safe for unlimited consumption. (Contact: Scott Cieniawski; 312-353-9184, cieniawski.scott@epa.gov).

FY05 Funding Guidance

On April 12th, GLNPO issued its annual request for Great Lakes project submissions through the USEPA Great Lakes National Program Office FY2005-2006 Funding

Guidance. (See March issue of Significant Activities Report for details). A total estimated amount of up to \$4,692,000 may be awarded under this announcement for furthering protection and cleanup of the Great Lakes ecosystem through projects addressing the following topics:

- Pollution Prevention and Toxics Reduction.
- Habitat (Ecological) Protection and Restoration.
- Emerging or Strategic Issues (including Invasive Species),
- Remedial Action Plan (RAP) Priorities, and
- Lakewide Management Plan (LaMP) Priorities.

The deadline for all project submittals is 8:00 AM Central time, Tuesday morning, May 31, 2005. Projects will be developed and submitted electronically. The Funding Guidance and the submittal program are available from http://www.epa.gov/glnpo/fund/2005guid/

(Contact: Mike Russ, 312-886-4013, russ. michael@epa.gov)

Upcoming Events	
2005	
May 31 st	Project Submissions Due for GLNPO 2005-2006 Funding Guidance
June 9 th -11 th	International Joint Commission 2005 Biennial Meeting and Great Lakes Conference, Kingston, Ontario
July 7 th -8 th	Great Lakes Regional Collaboration Summit I, Duluth, Minnesota
November 2 nd -4 th	State of Lake Michigan Conference, Green Bay, Wisconsin
December 6 th -7 th	Great Lakes Binational Toxics Strategy Stakeholder Forum and Integration Workgroup, Chicago, Illi- nois
December 12 th	Great Lakes Regional Collaboration Summit II, Chicago, Illinois

We welcome your questions, comments or suggestions about this month's Significant Activities Report. To be added to or removed from the Email distribution of the Significant Activities Report, please contact Tony Kizlauskas, 312-353-8773, kizlauskas.anthony@epa.gov.